REMARKS

Applicants respectfully request reconsideration and allowance of the present application in view of the foregoing amendments and following remarks. Claims 5, 24 and 29 have been amended by the Applicants. Upon entry of this Amendment, Claims 1-48 are pending in the application. Applicants respectfully reiterate arguments presented in prior responses to preceding Office Actions in this case and incorporate the prior responses herein by reference.

Rejection of Claims Under 35 U.S.C. § 102(e)

In the Office Action, claims 1-7, 22-31 and 46-48 under 35 USC 102(e) stand rejected as being anticipated by U.S. Patent No. 6,252,849 to Rom et al. ("Rom").

Independent Claims 1 and 25 Patentably Define Over Rom

The Office Action alleges that Rom discloses all of the steps of Claims 1 and 25. Applicants respectfully disagree and not that Rom does not disclose, inter alia, the recited calculation of a free margin. The free margin as required in Claims 1 and 25 is calculated as the difference between the remaining available buffer space and the expected total content of the links, expressed as $FM=AS-LE$. The value of this free margin is measured against thresholds to determine if a link should be paused or un-paused. Rom provides no free margin calculated using remaining available buffer space.

In rejecting Claims 1 and 25, the Office Action cites a formula that shows $B-M-H \geq N*Coff$ (col. 12, line 46) to support the allegation that Rom anticipates a free margin. However, the cited formula does not calculate the free margin as cited in the claims. The Rom equation is explicitly provided as part of an allocation scheme (col. 12, lines 42-46) for allocating sufficient buffers to avoid the discarding of information (col. 12, lines 33-45).

The differences in Rom's allocation formula and the claimed free margin calculation become apparent upon analysis of the individual components in the Rom formula. In the Rom formula, "B represents the total buffer space (denoted in the number of packets) in the output buffer" (col. 9, lines 51-52), M is guaranteed buffer space M (col. 12, lines 51-52) and H is the number of packets in the output buffer when the output port transits to the OFF state (col. 12,

lines 48-49). Thus, the Rom expression B-M is the total amount of buffer space available after reservation of guaranteed buffer space. Even assuming, *arguendo*, that this value corresponds to the claimed available buffer space (AS), there is no association of this value to a free margin (FM) or expected total content of the links (LE) as required by the claims. In other words, if B-M corresponds to AS, then Rom's formula merely suggests that $AS \geq H + N*Coff$. This is much different than the claimed formula (to adjust for comparison) of $AS = FM - LE$. Applicants have endeavored to test various other extrapolations of the two formulas, but are unable to make the two match in a manner that would support the Office Action's rejection.

The cited formula in Rom is merely designed to set a lower threshold of buffer space to be allocated to support N input ports (col. 10, line 1) that will receive Coff packets after a PAUSE has been sent (col. 12, lines 37-41). Therefore, it is apparent that the Rom formula is directed to preemptively allocating sufficient buffer space to avoid loss of information. Rom cannot be said to be directed to calculating a free margin wherein the free margin is then measured against thresholds as recited in claims 1 and 25 of the present invention.

For at least these reasons, Applicants request withdrawal of the rejections.

Dependent Claims 2-7, 22-24, 26-31 and 46-48 Further Patentably Define Over Rom

Claims 5, 24 and 29 have been amended to rectify minor typographical errors affecting solely the form of the claims. Claims 2-7 and 22-24 and Claims 26-27 and 46-48 depend directly or indirectly from Claim 1 and Claim 25 , respectively and are therefore not anticipated by Rom for the reasons stated above for Claims 1 and 25. In addition, the rejected dependent claims recite additional subject matter that is not disclosed or otherwise anticipated in Rom as cited in the Office Action.

For example, claims 3-4 and 27-28 recite an expected total content (LE) of the links that is estimated as the sum of the contents of all the input links. Rom provides no LE but instead provides an estimation of the maximum possible number of packets (N*Coff) remaining in links following transition to an OFF state that is used in the formula discussed above (see col. 12, lines 37-49). This maximum possible number of packets is described explicitly in Rom as: "Coff represents the *upper bound* of time (denoted in the number of packets)" (col. 12, lines 37-38, emphasis added). Therefore, it cannot be said that the Rom "maximum possible" measure

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anticipates the sum of the contents of all the input links required in claims 3-4 and 27-28. Additionally, Applicants observe that the taking into account of different link lengths and bit rates recited in Claims 4 and 28 are not to be found in Rom as cited by the Office Action.

Regarding Claims 5-7 and 29-31, Rom does not provide the recited link estimate, model based upon behavior of each port for calculating the link estimate, model consisting of a curve with segments representing states, or plurality of states. In the Office Action the Examiner proposes that response latency to the pause frame is inherent due to the propagation delay. However, a rejection based on inherency requires the non-explicit subject matter to be necessarily present in the cited reference. Applicants respectfully submit that even if the alleged inherency associates response latency with propagation delays, this inherency does not provide sufficient grounds to suggest that Rom anticipates the required elements including, for example, the model based upon behavior of each port. At best, the alleged inherency would merely anticipate that if a propagation delay exists, there will be a response latency. It would not necessarily follow that, in any system that experiences propagation delays, a model of the behavior of each port is, can be, or should be provided by the system. Therefore, in view of the absence of explicit or inherent support in Rom for the recited model, curve and states, Applicants request withdrawal of the rejections of Claims 5-7 and 29-31.

Regarding Claims 22-24 and 46-48, the Office Action alleges that the required setting of threshold levels is anticipated by Rom. However, the thresholds recited in the present application are used with a free margin and neither the free margin nor these thresholds are taught or suggested by Rom (see the discussion presented above regarding Claims 1 and 25). Thus Rom cannot be said to anticipate the setting of threshold levels recited in Claims 22-24 and 46-48.

For at least these reasons then, Applicants respectfully submit that the Rom specification does not anticipate each and every element of Claims 2-7, 22-24, 26-31 and 46-48. Consequently, Applicants respectfully request withdrawal of the rejections to these claims.

Rejection of Claims Under 35 U.S.C. § 103(a)

Claims 8-18, 21, 32-42 and 45 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Rom in view of U.S. Patent No. 6,456,590 to Ren et al. ("Ren").

Claims 8-18, 21, 32-42 and 45 Are Not Rendered Obvious By The Combination of Rom and Ren

Claims 8-17, 21, 32-41 and 45 depend from either Claim 1 or Claim 25 and, since Claims 1 and 25 have been shown to patentably define over Rom, it follows that these dependent claims are also allowable. Further, independent Claims 18 and 42 are allowable for at least the same reasons presented for Claims 1 and 25 because each requires calculating a free margin (FM) as set forth in claims 1 and 25.

The missing subject matter in Rom is not even alleged to be present in Ren. Therefore, for at the least the reasons stated, the combination of Rom and Ren does not render obvious Claims 8-18, 21, 32-42 and 45 and Applicants respectfully request withdrawal of the rejections.

Allowed Claims

In the Office Action, the Examiner allowed claims 19, 20, 43 and 44. Applicants thank the Examiner for noting the allowability of these claims.
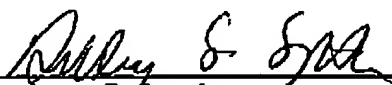
Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition of allowance and a Notice to that effect is earnestly solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,
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